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*Section 8*

## **Future Issues and Challenges**

### ***8.1 The Need for Continuing and Adaptive Management***

#### **Basin Management is Never-Ending**

This plan constitutes another step in management of the water resources in the Flint River Basin, but not the final step. It is important for all to understand that there will never be a final step. Management is ongoing and dynamic because changes in resource use and condition occur continually, as do changes in management resources and perspectives. Therefore, management planning and implementation must remain flexible and adapt to changing needs and capabilities.

#### **We've Done Well....But There is More to Do**

For the past few decades, management efforts have resulted in substantial improvements in water quality, and reduction in pollutant loading for many waters (see examples in Section 4). Much of these improvements stem from increased wastewater treatment at municipalities and industries, and from implementation of best management practices by landowners that help reduce soil and contamination runoff. Indeed, many of the waterbodies in the basin are fully supporting their designated uses. The assessments summarized in this plan show, however, that not all waters are at the level of quality deemed necessary to support designated uses. There are existing waters still in need of restoration and attention beyond existing management efforts.

#### **Today's Issues Require Actions by Many Different Stakeholders**

The current and proposed strategies summarized in this plan do not “solve” all existing problems. Many of the unsolved problems will require actions by stakeholders other than those that have been involved in planning to date. For example, resolution of fecal coliform bacteria problems will typically require local government (e.g., eliminating leaking and overflowing sanitary sewers) and private landowner actions (e.g., correcting failed septic systems; using best management practices in animal operations and land application of waste residuals). Other issues will require significant additional time and effort before they are addressed sufficiently (e.g., restoration of riparian zones and aquatic habitat). Some of these issues may require trial management efforts and adapting those efforts over time based on observations of what works well, particularly where there is no 100 percent effective solution evident at the time of strategy development. Future management should focus on the priorities among these continuing needs, as determined by communities and partners in management.

Additionally, continued growth in population is expected in the Flint basin, especially in the upper reaches of the basin around the Atlanta metropolitan area (see Section 2). This growth will place additional demands on water resources, and require corresponding responses in management. More people means more water use (drinking water, industrial consumption, irrigation), more stormwater runoff (from impervious surfaces of new houses, roads, industries, businesses, and parking lots), and more contamination (sediment; nutrients; organic material; pesticides, herbicides, and other toxics). Therefore it is essential that stakeholders continue to

work together to plan and implement the most cost-effective ways of restoring and protecting water resources.

### **Basin Management Must Blend Regulatory and Voluntary Approaches**

Although the regulatory authorities of agencies such as EPD are very important to protection and restoration of Georgia's waters, RBMP partners will continue to emphasize voluntary and cooperative approaches to watershed management. This will take time and be very challenging. Ultimate success in protecting natural resources for the people of Georgia, however, is dependent on those very same people. Long-term protection means that the people, governments, and businesses must learn collectively what is needed for protection and adapt their lifestyles and operations accordingly. Our experience indicates that we are much more likely to buy into proposed management solutions in which we have a say and control over how we spend our time and money. The challenge in the future, therefore, is to continue to "build bridges" between regulatory and voluntary efforts, using each where they best serve the people and natural resources of Georgia.

## ***8.2 Working to Strengthen Planning and Implementation Capabilities***

### **We Need to Understand One Another's Roles**

Increasing awareness and understanding of the roles and capabilities of local, state, and federal partners is one of the keys to future success in basin management for the Flint River. Lack of understanding can lead to finger pointing and frustration on the part of all involved. Increasing opportunities for stakeholders to develop this awareness and understanding should result in more effective management actions.

This basin plan provides one opportunity for stakeholders to increase their awareness of conditions in the basin, and of ongoing and proposed new management strategies. Within this context, stakeholders can develop a better understanding of certain roles and responsibilities. For example, this basin plan points out several areas where EPD has regulatory authority and corresponding duties including:

- Establishing water quality use classifications and standards
- Assessing and reporting on water quality conditions
- Facilitating development of River Basin Management Plans
- Issuing permits for point source discharges of treated wastewater, municipal stormwater discharges as required, and land application systems
- Issuing water supply permits
- Enforcing compliance with permit conditions

There are many areas, however, where organizations or entities other than EPD are responsible. For example,

- Septic tank permitting (County Health Department) and maintenance (individual landowners)
- Land development and zoning ordinances (counties, municipalities)
- Sanitary sewer and stormwater ordinances (counties, municipalities)
- Water supply source water protection ordinances (counties, municipalities)
- Flood plain management (FEMA, counties, municipalities)
- Implementation of forestry best management practices (landowners with support from the Georgia Forestry Commission)
- Implementation of agricultural best management practices (landowners with support from state and federal agricultural agencies)
- Proper use, handling, storage, and disposal of chemicals (businesses, landowners, municipalities, counties, etc.)

These are but a few of the areas involved, but they serve to illustrate how responsibilities are spread across many stakeholders in each basin. Additionally, there are other agencies and organizations that assist planning and implementation in many of these areas, i.e., regional development centers; federal, state, and local technical assistance programs; citizens groups; and business associations. As stakeholders become more familiar with one another's responsibilities and capabilities, they will more frequently be aware of appropriate partners to work with in addressing their issues of concern.

### **Let's Use the RBMP Framework to Improve Communication**

Raising awareness frequently involves two way communication. The RBMP framework's interactive planning and outreach sessions provide additional opportunities that support two-way communication. For example, Basin Technical Planning Team meetings provide opportunities for partners to share information on their responsibilities and capabilities with one another. Similarly, River Basin Advisory Committee meetings and Stakeholder meetings provide opportunities for citizens, businesses, government agencies, associations, etc. to share information and learn from one another. Although often requiring considerable time, these interactions are critical to the future of management in the basin because they build working relationships and trust that are essential to carrying out effective, integrated actions.

### **We Can Also Continue to Streamline Our Efforts**

Increased coordination will also result if partners in this approach continue to streamline their efforts. There are many laws and requirements with related and complementary goals, e.g., Georgia's Growth Strategies Act, Planning Act, River Corridor Protection Act, Comprehensive Ground Water Management Plan, and River Basin Management Planning requirements, in addition to federal Clean Water Act water quality regulations and Safe Drinking Water Act source water protection requirements. Partners should continue to find ways to make actions under these laws consistent and complementary by eliminating redundancy and leveraging efforts. Again, partners can use the forums within the RBMP framework (e.g., river basin team

and advisory committees) to discuss and implement ideas to streamline roles and make the best use of their funds and staff resources.

### ***8.3 Addressing the Impacts from Continued Population Growth and Land Development***

#### **Basin Planning Can Support More Consistent Implementation of Protection Measures**

In addressing the impacts from anticipated population growth and increased land development in the basin, future management will need to build off increased understanding of roles and use improved forums for coordination to develop more specific action plans. Historically, mitigating impacts from newly developed areas has been approached mostly on a case-by-case basis. Unfortunately, this has resulted in inconsistent planning and implementation of water resource protection measures. River basin planning offers an opportunity for a more consistent approach by making it easier for landowners, local governments, and businesses to work together at the watershed and basin level.

One way that Georgia EPD will address this issue is by only approving permits for new and expanding permits for water withdrawals and wastewater discharges that are consistent with the basin plan and that meet the intent of the Georgia Planning Act. Rather than waiting until the permit application process, however, local governments can work together and with EPD to work out some of these issues in advance. There is incentive for organizations such as the Georgia Water Pollution Control Association (WPCA), the Georgia Municipal Association (GMA), the Association of County Commissioners of Georgia (ACCG), and Regional Development Centers (RDCs) to work out consistent methods for watershed assessments of developing areas and for improving implementation of protection measures as development occurs. EPD, DCA and other partners can help build these planning bridges by facilitating discussion at RBMP meetings and supporting local initiatives aimed at this issue.

#### **We need to Work Closely with the ACF Interstate Commission**

Another future challenge is securing sufficient allocation of water from the ACF Interstate Commission to maintain needed water supplies for municipal, agricultural, and other purposes in the face of increasing growth and land development pressure. During the remainder of 1997 and 1998, the States of Alabama, Florida, and Georgia, together with the Corps of Engineers, will complete the ACT/ACF data base and modeling effort to analyze alternative options for management of water quantity. The Interstate Commission will be responsible for developing a water allocation formula by the end of 1998. The affected states and their citizens will need to work together to critique, improve, approve and implement the allocations.

### ***8.4 Entering the Next Iteration of the Basin Cycle***

#### **Build on the Foundation of Previous, Ongoing, and Planned Efforts**

As discussed above and in Section 7.2, there is more work to do to adequately restore and protect all of Georgia's water resources. Following a brief period for focusing on implementation of this plan, the Flint River Basin will enter into its second iteration of the basin management cycle (scheduled for April, 1999). The next cycle will provide opportunity to review issues that were not fully addressed during the first cycle and to reassess for

identification of any new priority issues. In other words, future management efforts can and should build on the foundation created by previous, ongoing, and already planned management actions.

### **This Basin Plan Provides Historical Reference for the Next Basin Plan**

Partners will not have to start from scratch during the next iteration. The information in this document provides an historical account of what is known and planned to date. Stakeholders in the Flint Basin will know what was accomplished in the first iteration, and can therefore focus on enhancing ongoing efforts or filling gaps. Data collection and public discussion activities scheduled early in the next cycle can draw on information in the plan to identify areas in need of additional monitoring, assessment, and strategy development.